

## CLAIMS

Having described the invention in sufficient detail, it is considered as novelty and therefore it is claimed as property what is expressed and content in the following disclosures.

1. 3-D image projection system characterized by the Electronic and Software Elements **C** (built by a projection screen, among other elements, that constitutes the luminous source to project two-dimensional images), combined with the 3D Optical Subsystem **A** built by a stereoscopic screen, so that images can be viewed in daylight, with an immersion effect, suspended in the air, as real volumes in third dimension and without a visual aid. The stereoscopic screen is transparent, with certain physical properties and may has certain inclination and bend (conical, circular, elliptical or equivalent forms), according to the geometric optical variations required.

2. 3-D image projection system, as it is claimed in the previous disclosure, also characterized by the Electronic and Software Elements **C** variations used to reproduce two-dimensional images that are selected from any possible combination among projection systems (computer, television set, VCR, slides, tapes or film projectors, among others) and media storage systems (optical, electromagnetic or any other technology regardless of the physical and logical format used).

3. 3-D image projection system, as it is claimed in disclosures 1 and 2, also characterized by the optional Optical Geometric Variations **B** which can also be combined with the Electronic and Software Elements **C** and the 3D Optical Subsystem **A** for allowing the use of optical geometric variations, including additional optical lenses, mirrors or secondary screens between the projection screen and the stereoscopic screen, for different applications and requirements.

4. 3-D image projection system, as claimed in disclosures 1 to 3, also characterized by the Electronic and Software Elements **C** to built an Operation and Projection Schedule and a 3D Video-Library to control and project continuously different 3D messages in a period of time, turn on and off the 3D System and report the operation status.

5. 3-D image projection system, as claimed in disclosures 1 to 4, also characterized by the Electronic and Software Elements **E** that allows the 3D Multifunctional System to be controlled from a Central Unit through an Operation and Projection Schedule and a 3D Video-Library.

6. 3-D image projection system, as claimed in disclosures 1 to 5, also characterized by the Electronic and Software Elements **E** that control, administrate, supervise and operate the system from a Central Unit through a telecommunications solution.

7. 3-D image projection system, as claimed in disclosures 1 to 6, also characterized by the Electronic and Software Elements **F** that control, administrate, supervise and operate the system in situ.

8. 3-D image projection system, as claimed in disclosures 1 to 7, also characterized by the Electronic and Software Elements **D** to enhance the global effect of 3D images projection, such as back plane screens, video or camera recorders or interactive functions based on presence sensors, among many others.

9. 3-D image projection system, as claimed in disclosures 1 to 8, also characterized by being able to include one or several of the additional **G** functional devices, such as a printed information distribution system; queue ticket dispenser; public or private telephones; weighing system; optical reading system; form dispenser with support table and pen; vending machines; automatic ticketing and payment systems; handheld, PDA, computer or other electronic devices that interact to load and download information; any other equivalent solution that may be required in a public or private area where people tend to congregate in groups or individually.

10. 3-D image projection system, as claimed in disclosures 1 to 9, also characterized by the **H** case that contains all the elements described above in addition to other hardware and software components to set up the operation of the system under different environments and climatic conditions.

11. 3-D image projection system, as claimed in disclosures 1 to 10, also characterized by the Electronic and Software Elements **C** that are essentially built into a computer (hardware and software) to operate, administrate, maintain and control the 3D System as is claimed in any of the disclosures above, including internal or external

media storage and/or specific image projection devices and their interfaces (LCD projectors, TV, DVD, VCR, CD, etc.); the computer operating system; the software to administrate and operate databases and processes; the computer software and hardware elements.